

**CLAIMS**

What is claimed is:

- 5        1. A patient monitoring system comprising:
  - a patient monitoring station;
  - a parameter cable that connects the patient monitoring station to one or more sensors; and
  - a memory device disposed within the parameter cable.
- 10      2. The system of claim 1, wherein the memory device is disposed in a parameter cable adapter that connects the parameter cable to the patient monitoring station.
- 15      3. The system of claim 1, wherein the memory device is disposed in a parameter cable adapter that connects the parameter cable to the one or more sensors.
- 20      4. The system of claim 1, wherein the memory device is a 1-wire memory chip.
- 25      5. The system of claim 1, wherein the patient monitoring station comprises one or more modalities of at least one of a electrocardiography/respiration (ECG/Resp), pulse oximetry (SpO<sub>2</sub>), cardiac output (CO), temperature (Temp.), invasive blood pressure (IBP), mainstream end tidal carbon dioxide (ETCO<sub>2</sub>), non-invasive blood pressure (NBP), venous oxygen saturation (SvO<sub>2</sub>), impedance cardiography (ICG), electroencephalography (EEG), Bispectral Index (BIS), Neuromuscular transmission (NMT), entropy monitoring, metabolics monitoring, anesthetic agent monitoring, and spirometry /respiratory mechanics monitoring.

6. The system of claim 1, wherein a hardware device disposed on the patient monitoring station facilitates communication between the patient monitoring station and the memory device.

5        7. A patient parameter cable comprising:  
            a signal acquisition cable;  
            an adapter that connects the signal acquisition cable to a patient monitoring station; and  
            a memory device disposed in the adapter.

10        8. The patient parameter cable of claim 7, wherein the memory device is a one-wire memory chip comprising a one-wire interface.

15        9. The patient parameter cable of claim 7, further comprising one or more sensors.

10. The patient parameter cable of claim 9, further comprising a sensor adapter that connects the one or more sensors to the signal acquisition cable.

20        11. A patient parameter cable comprising:  
            a cable for signal acquisition;  
            a station adapter for connecting the cable to a patient monitoring station;  
            a sensor adapter for connecting the cable to one or more sensors; and  
            a memory device disposed in the station adapter.

25        12. A patient parameter cable comprising:  
            a cable for signal acquisition;  
            a sensor adapter for connecting the cable to one or more sensors; and  
            a memory device disposed in the sensor adapter.

13. The patient parameter cable of claim 12, further comprising a station adapter for connecting the cable to a patient monitoring station.

14 The patient parameter cable of claim 12, further comprising one or more sensors connected to the sensor adapter.

15. The patient parameter cable of claim 14, further comprising a station adapter for connecting the cable to a patient monitoring station.

16. A patient parameter cable comprising:  
a cable for signal acquisition;  
a station adapter for connecting the cable to a patient monitoring station;  
a sensor adapter for connecting the cable to one or more sensors; and  
one or more memory devices disposed in at least one of the station adapter and sensor adapter.

17. The patient parameter cable of claim 16, further comprising one or more sensors connected to the sensor adapter.

18. A patient parameter cable comprising:  
a cable for signal acquisition;  
a memory support disposed on the cable; and  
a memory device disposed in the memory support.

19. The patient parameter cable of claim 18, further comprising one or more sensors.

20. The patient parameter cable of claim 18, further comprising a station adapter.

21. The patient parameter cable of claim 18, further comprising a sensor adapter.

5 22. The patient parameter cable of claim 21, wherein one or more sensors are connected to the sensor adapter.

23. The patient parameter cable of claim 21, further comprising a station adapter.

10 24. A patient parameter cable comprising:  
a cable for signal acquisition;  
a memory support disposed on the cable;  
a memory device disposed in the memory support;  
a station adapter for connecting the cable to a patient monitoring system; and  
15 a sensor adapter for connecting one or more sensors to the cable.

25. The parameter cable of claim 24, further comprising one or more memory devices stored in at least one of the station adapter and sensor adapter.

20 26. A patient parameter cable comprising:  
means for carrying signals from one or more sensors to a patient monitoring station;  
means for connecting the parameter cable to a patient monitoring station;  
means for connecting the parameter cable to one or more sensors; and  
25 means for storing information in the parameter cable.

27. A method for monitoring a patient comprising:  
connecting a parameter cable having one or more sensors to a first patient monitoring station;  
30 affixing the one or more sensors to a patient;  
inputting demographics of the patient into the first patient monitoring station;

calibrating the first patient monitoring station;  
monitoring the patient with the first patient monitoring station;  
populating a memory device disposed in the parameter cable with demographics, calibration settings, and acquired monitored data.

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28. The method of claim 27, further comprising:  
disconnecting the parameter cable from the first patient monitoring station;  
connecting the cable to a second patient monitoring station;  
retrieving the demographics, calibration settings, and acquired monitored data  
from the memory device into the second patient monitoring station; and  
monitoring the patient with the second patient monitoring station.

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29. The method of claim 28, wherein the one or more sensors are detached and reattached to the patient.

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30. The method of claim 28, wherein the first and second patient monitoring stations incorporate modalities of at least one of a electrocardiography/respiration (ECG/Resp), pulse oximetry (SpO<sub>2</sub>), cardiac output (CO), temperature (Temp.), invasive blood pressure (IBP), mainstream end tidal carbon dioxide (ETCO<sub>2</sub>), non-invasive blood pressure (NBP), venous oxygen saturation (SvO<sub>2</sub>), impedance cardiography (ICG), electroencephalography (EEG), Bispectral Index (BIS), and neuromuscular transmission (NMT), entropy monitoring, metabolics monitoring, anesthetic agent monitoring, and spirometry/respiratory mechanics monitoring.

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31. A computer program, provided on one or more tangible media, for monitoring a patient, comprising a routine for populating a memory device disposed in a parameter cable with data from a first monitoring station.

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32. The computer program of claim 31 further comprising a routine for retrieving the data from the memory device disposed in the parameter cable to a second monitoring station.

33. The computer program of claim 32, wherein the data comprises at least one of a cable identification number, patient demographics, calibration settings, and analytical data.